

# Celebrating an Ecologist's Eloquence and Vision

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The onetime chicken coop known almost reverently as The Shack still stands, rough-boarded and stark in the middle of a clearing surrounded by tall pines, oaks and maples planted decades ago by the former occupant and his family.

The cabin's only concession to comfort is a magnificent stone fireplace. Implements for dealing with the land and its wild inhabitants festoon the walls or lie casually about. Saws. Shovels. An auger. A box containing bird-banding equipment.

It was at The Shack, in south-central Wisconsin about an hour's drive north of Madison, that the ecologist **Aldo Leopold** -- one of the half-dozen most influential thinkers of the last 150 years on the relationship of human beings to the rest of nature -- gleaned many of his insights and sharpened his ideas. He collected a lot of his observations and thoughts in a small volume of essays published 50 years ago this month, titled "A Sand County Almanac and Sketches Here and There."



The crowning essay, "The Land Ethic," argued that humans had a moral obligation to respect and protect the rest of the natural world. Human ethics and the human sense of community, he held, should be expanded to include not just people but also the land and its wild inhabitants. This land ethic, he wrote, "changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it."



"A thing is right," he wrote, "when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." In one form or another, this idea is at the heart of the modern conservationist's credo.

Leopold may be less than a household word to many Americans, perhaps most. But in the field of conservation he is a titan. "A Sand County Almanac" is a bible of the environmental movement every bit as much as Rachel Carson's "Silent Spring." In Washington, where national conservation policy has been going through major changes of philosophy in recent years, his name and ideas are everyday currency.

So it is that in this 50th anniversary year of the book, which has sold more than 1.5 million copies and is still going strong, Leopold's ideas are being scrutinized afresh. The Wisconsin Academy of Sciences, Arts and Letters recently held a conference here to examine his legacy. And two new books about his work have just been published:

\*"**Aldo Leopold**: For the Health of the Land; Previously Unpublished Essays and Other Writings," edited by Dr. J. Baird Callicott and Dr. Eric T. Freyfogle (Island Press/Shearwater Books).

\*"The Essential **Aldo Leopold**: Quotations and Commentaries," edited by Dr. Curt D. Meine and Dr. Richard L. Knight (University of Wisconsin Press).

The science of ecology has advanced rapidly in the last half century, and some of Leopold's writings are a bit outdated. Nevertheless, the central strains of his thought have remained remarkably durable, said Dr. Meine, a conservation biologist and writer based at the International Crane Foundation in Baraboo, Wis., and an organizer of the Madison conference.

Indeed, virtually every major idea, trend and enterprise in modern conservation, especially in the 1990's, was anticipated or advocated by Leopold: Setting aside protected wilderness. Treating predators not as pests to be eliminated but as essential ecological actors. Deliberately restoring the health of ecosystems degraded by human activity, from replanting prairies to reintroducing wolves. Using fire to regenerate landscapes. Taking entire ecosystems with their full, diverse panoply of species, rather than just individual species, as the main focus of conservation efforts. Treating people and their needs as an integral part of the ecosystem to be protected or restored rather than as something separate from nature.

More eloquently and effectively than anyone else, perhaps, Leopold applied the insights of the emerging science of ecology to conservation and set it all in a guiding philosophical context.

But Leopold did not live to see his influence grow. One week after "A Sand County Almanac" was accepted for publication by Oxford University Press, in April 1948, he hurried from The Shack to help fight a fire on a neighbor's land. There he had a heart attack and died at 61. "He never saw the impact of those essays; he would be very pleased," said Dr. Susan Flader, a historian and Leopold scholar at the University of Missouri at Columbia. But, she said, he was also a low-keyed, humble person who would probably feel "that the attention should be focused on the land."

By the time Leopold was born in Iowa in 1887, a vibrant tradition of conservation thought and values had already been established in America. Henry David Thoreau had argued that humanity could save itself not by destroying wilderness, but by becoming one with it. George Perkins Marsh, a Vermont naturalist, had written that nature, left alone, is basically stable and that wherever humans go, "the harmonies of nature are turned to discord." John Muir foreshadowed the science of ecology with his belief that everything in the universe is "hitched" to everything else. He also argued that wilderness existed for its own sake and so had to be honored and protected.



Leopold cut his intellectual teeth in a more utilitarian tradition established by Gifford Pinchot, the nation's chief forester under President Theodore Roosevelt. Pinchot believed that forests should serve society's economic needs, but that destroying them for short-term gain was self-defeating in the long run. Thus, conservation along scientific principles was essential.

With a master's degree in forestry from Yale University in hand, Leopold went to work for Pinchot's Forest Service in the Southwest. As one of the first conservationists to advocate the setting aside of protected wilderness areas, he was instrumental in establishing the first such Federal area, in the Gila National Forest of Arizona. He had no illusions about such actions, however: "Any wilderness program," he wrote, "is a rear-guard action, through which retreats are reduced to a minimum."

Two other interests especially engaged him in the Southwest: the whole complex of landscape processes, like fire and erosion, that shaped the vegetative mosaic of the region, and what was then called game management. The first interest would in time ripen into an appreciation of a landscape or an ecosystem as an integrated community of living things. The second would lead to a remarkable epiphany in which his view of the role of predators reversed by 180 degrees.

In the 1920's, wolves, mountain lions and grizzly bears were generally considered "varmints," as Dr. Flader puts it, and Leopold was an enthusiastic exterminator of them. But in a famous "Sand County" passage, he wrote of shooting an old wolf and reaching her "in time to watch a fierce green fire dying in her eyes." He came out of the experience believing that wolves were as essential to the healthy functioning of nature as were the deer that the exterminators thought they were protecting.

Later, in Wisconsin, he spent much of the time and energy of his last years fighting a bitter battle about overpopulation by deer. Like many present-day ecologists, Leopold believed that in the absence of predators, too many deer strip the landscape of vegetation, thereby altering the entire web of life in negative ways.

As his thoughts evolved, they focused more and more on what he called the health of the wild landscape as a whole, which, to him, was the paramount conservation concern. To him, the elimination of wolves and the proliferation of deer degraded the landscape's health, making forceful corrective action necessary.

Leopold's thought was influenced not least by the emergence of ecology as a science, and in particular by two concepts: that nature is an interdependent community of living things, and that an ecosystem is "a fountain of energy flowing through a circuit of soils, plants, and animals."

Leopold took his in-the-round view of nature to the University of Wisconsin, where he became a professor in 1928. In 1935, he and his wife, Estella, bought the 80-acre abandoned farm on which The Shack stands, and there for the next 13 years, on weekends, they and their five children (all of whom later became accomplished naturalists) bonded with the land and used it as their ecology laboratory.

It was also at The Shack that Leopold indulged a pioneering passion for ecological restoration. Many of the trees the family planted on the desolate, played-out land failed to take root at first, and when they did and eventually grew into a thick forest. The result

represented an artificial garden as much as it did a restoration of the original prairie-savanna ecosystem.

If Leopold were doing it today, he would undoubtedly do it differently, said Wellington (Buddy) Huffaker, the executive director of the **Aldo Leopold** Foundation Inc., which now owns the site.

Leopold was also a prime mover in a more accurate, scientifically based effort at the university arboretum in Madison to restore examples of Wisconsin's original ecosystems. There, thick, waving prairie grasses much taller than a man's head testify today to the beginnings of a restoration movement that has grown into a vital and far-flung enterprise across the United States. It is this restorationist impulse, some experts believe today, that holds the most promise for the future of conservation.

But to tinker intelligently with nature, Leopold wrote, it is necessary first to save as many wild species as possible -- "to keep every cog and wheel" of an ecological structure only dimly understood by humans.

As was made clear at the recent Madison conference, Leopold fully recognized that the human mark on the natural world is inevitable and indelible, and must somehow be accommodated. He also believed that despite the establishment of protected public lands, the outcome of the conservation struggle would be determined mostly on private land. Thus, the land ethic. Dr. Freyfogle, an editor of one of the new Leopold books, believes that Leopold came up with the land ethic after finding other arguments and tactics insufficient for protecting private land.

Today, conservationists are largely recapitulating Leopold's progression: while they continue to argue that there are sound economic and utilitarian reasons for insuring a healthy landscape (as did Leopold), they are more and more putting their eggs in the basket of morality -- saving creation.

Leopold's thought needs to be updated, it was suggested in Madison, to take account of ecologists' later insights. For example, it is now clear that nature is usually in a constant state of flux, not static balance, even in the absence of human disturbance. And some participants called for expanding the land ethic to include a new "consumption ethic" that would, for example, make it morally unacceptable to cut down pristine forests to build wasteful, oversized houses.

But the land ethic itself, many say, remains ahead of its time. It has yet to become a general societal norm; land is still viewed mostly as a commodity, as human slaves were before societal ethics were expanded to include them.

As Leopold wrote in "Sand County," "there are some who can live without wild things, and some who cannot." In a mechanized, electrified, increasingly virtual world where economic concerns are dominant, many can.

So it remains to be seen whether society at large will ever embrace the simple Leopold proposition that people must pay the rest of nature the same ethical and moral respect that they pay themselves. Leopold's disciples hold that if people cannot live with the rest of nature without destroying it, then modern human society is not a worthy one.